Empowering the AI Boom in the APAC Region

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As the world turns and rapidly moves into a new era driven by digitization and accelerated by artificial intelligence, we reflect upon the tumultuous storm provoked by COVID-19. In the APAC region where the pandemic originated, data centers exponentially rose to the occasion and swiftly adapted to create a resilient front line across sectors to defend against the catastrophic effects brought on by the novel coronavirus. On its path of destruction, COVID-19 uncovered brand-new ways of conducting business, creating opportunities for a region that has historically lagged behind North America or Europe in technology adoption to lead the way.

History has a way of repeating itself, and while we hope for a crisis of this magnitude to never strike again, the stark reality is that one most likely will. This realization brings us to how an emerging region leverages its recent boom in the AI market to position itself as a global frontrunner over the next decade to sustain a disrupted society.

Rewinding to a few years ago, AI was merely a buzzword, in its infancy as data centers and colocation space across the Asia-Pacific region started to explode. Early adopters made a paradigmatic shift to this intelligent technology enabling a powerful stance. Together, established AI-powered organizations and those forced to adopt and pivot quickly control the narrative, despite difficult times.

Data centers and AI applications have a symbiotic relationship: one won't be successful without the other. The fact that these two industries have grown side by side across the emerging APAC region is not a coincidence. APAC data center companies have a responsibility to continue innovating to keep up with an exponentially growing demand. Supporting the use of AI applications that will help foster advancements across critical sectors such as healthcare,

education, agriculture, manufacturing and more, data centers are establishing APAC as an attractive region for companies worldwide in which to conduct business.

AI inside data centers

Inside the data center, AI becomes vital from both operational and customer demand perspectives. Consider it in concert with machine learning (ML): these two progressive technologies are instrumental in reducing expenditures and increasing efficiency. Roughly 60 percent of data center operational costs can be attributed to power requirements; AI and ML provide data center operators the intelligence needed to save significantly on power and cooling. With environmental concerns and sustainability becoming more vital than ever, AI plays an important role in becoming part of the solution instead of part of the problem.

Moreover, AI plays an essential role in detecting issues that may lead to outages, resulting in significant customer losses. Before AI technology took center stage, data centers were monitored entirely by humans. When an outage arose, internal data center staff would need to isolate the issue and recover. Today, with the support of AI and ML, technology pinpoints developing issues, which informs staff of an outage that may be lurking. Humans can then take the necessary steps to prevent the blackout, keeping customers online and preventing costly downtime. Not only is technology playing a critical part in keeping businesses operational, but it allows them to continue serving customers and prevents loss of productivity and revenue.

Implementing AI-powered automation within data centers is a growing trend because it offers greater resiliency and efficiency. Executing automation helps operators monitor sites via remote capabilities. Additionally, end-users can remotely monitor their networks and racks virtually 24/7. During the pandemic and beyond, the demand for colocation is on the rise as travel restrictions and concerns heighten, making remote hands and virtual monitoring an essential part of keeping facilities operational and maximizing up-time of critical importance.

With a shortage across the region in skilled tech talent, AI will assist in achieving more with less human resources. By increasing the use of next-generation technologies and artificial intelligence, data centers are able to maximize the productivity of staff. Augmented Reality (AR) and Virtual Reality (VR) also come into play as AR and VR devices that leverage AI are being implemented to manage the data center better. At the same time, AI-powered predictive analytics allow operators to realize lower maintenance costs.

APAC's AI revolution

Outside the data center, AI-driven trends are commanding data center enablement across the Asia-Pacific region. There is a pretty simple choice for those that want to succeed: go AI or go home. It is no longer an option to employ and support AI-powered technologies; it is required, especially if APAC is to continue leading the world in this market. Healthcare is stepping up to the plate across the region to address social determinants, apply predictive care and streamline administrative processes, ultimately saving the industry substantially. When COVID-19 hit, cutting-edge applications of AI radically enabled healthcare, giving us a glimpse of what's to come in the future. In South Korea, AI-enabled, location-based messaging played a crucial role in

reducing the virus's spread. Simultaneously, [robots](#) in China delivered food, medicine and supplies to infected patients in hospitals and quarantined families.

Last year, the 2019 World Artificial Intelligence Conference offered a glimpse into the industry's latest trends. It was fitting that the conference was named "Intelligent Connectivity, Infinite Possibilities," because that is what AI truly delivers. Impacting so many areas of our future, AI is opening the door for global corporations to expand to this cultural, emerging region. These latest inventions are transforming industries from ['smart' trash cans](#) to a 5G-based robot, used in hazardous industrial scenarios like chemical plants and mining firms. It was fascinating to learn, according to a [report](#) released at the conference, that China's AI chips market was expected to reach 12.4 billion yuan (about 1.73 billion U.S. dollars) in 2019.

The heart of global AI development

At the heart of global AI development, APAC is pumping billions of dollars into AI-led initiatives. Throughout the region, many countries are formulating task forces and committees for creating detailed national AI strategies. Although each country's budget, focus and approach slightly differ, all roads lead to automated economies and data ecosystems. For instance, in 2017, China launched its three-phase New Generation of Artificial Intelligence Development Plan. Setting broad goals throughout 2030, the nation is in the midst of its first [phase](#). During this phase, China seeks to have AI technology applications become a new way to improve people's livelihoods, strongly supporting China's entrance into the ranks of innovative nations and comprehensively achieving the struggle toward the goal of a moderately prosperous society.

In 2019, the Smart Nation of Singapore, also the third-largest data center hub in the world, developed its own comprehensive [National Artificial Intelligence Strategy](#). This strategy will play an integral role in the island's Smart Nation Journey, which encourages Singaporeans, businesses, researchers and the government to work in tandem. The whole-nation effort also has many avenues where companies can receive support from its government to promote greater use of AI.

As the journey continues across the region, Japan's "Society 5.0" recently updated its AI strategy in 2019 and targets five designated priority areas: manufacturing, transportation and logistics, health and medical care, agriculture and disaster response. South Korean leaders implemented a budget the equivalent of $21 billion US devoted entirely to science and technology and AI sectors. From the tigers to the dragons, it is no secret that APAC is driving AI.

Bringing AI to life

While all of these strategies are playing out, the spotlight is shining on the region's data centers.

Here is where the script comes to life and the AI-driven strategies are deployed. While AI is being leveraged to operate and automate data centers, inside the facilities is where all of the region's AI plans come to life. Act by act, data center operators are pivoting as the use of AI rapidly accelerates. As machine learning and artificial intelligence become more mainstream, empowering the AI-enabled cloud solutions utilized day in and day out, data centers are

delivering nimble networks and servers and edge technologies to facilitate the deployment of AI models closer to end-users.

There is nothing artificial about the AI transformation that is occurring within APAC. [GlobalData](#) estimates the APAC region to account for approximately 30 percent of global AI platforms revenue (around $97.5 billion by 2024), a number that will surely soar given the effects of COVID-19. This real-time scenario is as real as it gets. While challenges exist for data center operators, opportunities are knocking at the door. As the epicenter of our lifetime's biggest crisis, it is also the core of a whole new digital world ahead. From medical imaging, data analytics, voice recognition, chatbots pre-approving mortgage loans and more, deep learning and AI are changing the game. Data centers applying the necessary steps to employ AI within and outside their facilities will continue to the next level. Those that do not will be left behind.

Data center operators have been at the forefront of AI technology, but now is not the time to rest on our laurels. In order for the APAC region to make further technological advances that create stronger abilities for an improved quality of life, we must push ourselves further than we ever thought possible. In control of its own destiny, the APAC region must now continue moving forward and leveraging its position as an artificial intelligence leader, revitalizing the way we do business forever.